

# **EXHIBIT C**

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## INVESTMENT PROJECT

### 'CONSTRUCTING AND EQUIPPING COMPANY PRODUCTION PLANT'

#### INVESTOR:

EcoCortec, limited liability company, Beli Manastir

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## 1. INTRODUCTION

EcoCortec, limited liability company, was founded and registered in 2004, with the basic business activity of the production of plastic materials and products. The company is closely linked to the US company CORTEC Co. that owns the licence (the proprietor of patents) for the production of bio-degradable plastic materials and plastic materials with VpCI inhibitors for corrosion protection.

The EcoCortec company is the investor for the investment program of Constructing and Equipping the Production Plant. The future production plant represents the so-called Greenfield investment, i.e. an investment of complete construction from bare plot to finished plant, with all necessary permits and assents, that will be located in the business area II zone in Beli Manastir.

The investment program subject is an appraisal of the justifiability of investing in the construction and equipping of the production plant in the industrial-business zone II of the Town of Beli Manastir.

The pro forma investment value is EUR 4,119,012, i.e. HRK 30,563,066.

The investor would build a business facility – the production and warehousing hall in the business zone of Beli Manastir, thereby securing the necessary preconditions for starting production and employing new employees. Besides the construction of the business facility, the investment also relates to the purchase of new production lines and auxiliary tools and machinery, and the purchase of vehicles for the procurement and transport of raw materials, and warehousing activities and the distribution of finished products.

**The investment** relates to the following:

- investments in fixed assets are HRK 26,572,365 or 87% of the overall investment value
- investments in working capital are HRK 2,719,301 or 9% of the overall investment value
- founding investments are HRK 1,271,400 or 4% of the overall investment value

The financial structure of the investment project would be as follows:

- investor funds in the amount of HRK 8,307,585, which is 27% of the total financing sources
- and loan funds in the amount of HRK 22,255,481, which is 73% of the total financing sources

The investment program has been created in accordance with the methodology for the creation and appraisal of investment projects that is compatible with international standards and practice.

**2. INVESTMENT PROJECT SUMMARY****2.1. INVESTOR**

Full name:	<b>ECOCORTEC, limited liability company, for the production and sales of plastic material products</b>
Short name:	<b>EcoCortec, limited liability company</b>
Address:	<b>Beli Manastir, Bele Bartoka 29</b>
Tax and Registration number:	<b>1891782</b>
Basic business activity:	<b>production and trade</b>
Business bank:	<b>Erste bank</b>
Telephone:	<b>031 705 011</b>
Fax:	<b>031 705 012</b>
WEB:	<b><u><a href="http://www.ecocortec.hr">www.ecocortec.hr</a></u></b>

**2.2. PROGRAM:**

Name:	<b>Constructing and Equipping the Production Plant in Beli Manastir</b>
Location:	Beli Manastir, Business-Economic Zone Petlovac II
Investment goal:	<ul style="list-style-type: none"> <li>- revenues realized by exports to the EU market</li> <li>- new employment</li> <li>- initiating production</li> </ul>
Time plan:	
<ul style="list-style-type: none"> <li>- securing financial means:</li> <li>- obtaining permits, construction and equipping of the facility</li> <li>- production start</li> </ul>	<p>during March 2006</p> <p>until August 2007</p> <p>in September 2007</p>

Table No 1: Pro Forma Investment Value

No	DESCRIPTION	Amount in Kuna	Amount in Euro	Share in %
<b>A.</b>	<b>FIXED ASSETS</b>	<b>26,572,365</b>	<b>3,581,181</b>	<b>87%</b>
1.	LAND PLOT	583,865	78,688	2%
2.	THE CONSTRUCTION OF THE PHYSICAL OBJECT	7,568,400	1,020,000	25%
3.	THE COST OF ARCHITECTS AND OBTAINING PERMITS	586,180	79,000	2%
4.	THE CONSTRUCTION OF INSTALLATIONS AND PLOT INFRASTRUCTURE (water, sewage, roads, gas connection, power connection)	1,669,500	225,000	5%
5.	LOCAL COMMUNAL FEE (19,611 m3 x 20 HRK/m3)	392,220	52,860	1%
6.	THE COST OF WATER AND SEWAGE NETWORK CONNECTION .	148,400	20,000	0%
7.	The cost of power network connection – 1000kW – middle-range voltage facility	1,200,000	161,725	4%
8.	The cost of power network connection – 1000kW – low-range voltage facility	400,000	53,908	1%
9.	THE COST OF CONNECTION TO OTHER INFRASTRUCTURAL NETWORKS (gas, phone, north exit to main road line)	371,000	50,000	1%
10.	MACHINERY (transport + assembling)	8,904,000	1,200,000	29%
11.	WORK VEHICLES (fork-lifter, trucks etc.)	445,200	60,000	1%
12.	MACHINERY OUTSIDE PRODUCTION LINES (machinery for shaping film into finished products, packing machine, machinery cooling system, raw material blender, raw material vacuum pumps, reprocessing machine, laboratory equipment), engineering and electronic project	4,229,400	570,000	14%
13.	HARDWARE + SOFTWARE – business IT system	74,200	10,000	0%
<b>B</b>	<b>FOUNDING INVESTMENTS, INTANGIBLE ASSETS</b>	<b>1,271,400</b>	<b>171,348</b>	<b>4%</b>
13	THE COST OF INVESTMENT PROJECT CREATION	10,000	1,348	0%
14	EMPLOYEE TRAINING	222,600	30,000	1%
15	LICENCE, CONSULTING SERVICES	1,038,800	140,000	3%
<b>C</b>	<b>WORKING CAPITAL</b>	<b>2,719,301</b>	<b>366,483</b>	<b>9%</b>
	<b>TOTAL</b>	<b>30,563,066</b>	<b>4,119,012</b>	<b>100%</b>

Table No 2: Financing Sources

No	DESCRIPTION	Amount in Kuna	Amount in Euro	Share in %
<b>A.</b>	<b>LOAN FUNDS</b>	<b>22,255,481</b>	<b>2,999,391</b>	<b>73%</b>
1.	FIXED ASSETS	19,313,580	2,602,908	63%
2.	WORKING CAPITAL	2,719,301	366,483	9%

3.	FOUNDING INVESTMENTS, INTANGIBLE ASSETS	222,600	30,000	1%
<b>B</b>	<b>OWN FUNDS</b>	<b>8,307,585</b>	<b>1,119,621</b>	<b>27%</b>
1.	FIXED ASSETS	7,258,785	978,273	24%
2.	FOUNDING INVESTMENTS, INTANGIBLE ASSETS	1,048,800	141,348	3%
	<b>TOTAL</b>	<b>30,563,066</b>	<b>4,119,012</b>	<b>100%</b>

Table No 3: Investment Indicators

Internal profitability rate:	<b>22.77%</b>
Current net project value:	<b>53,838,419</b>
Relative current net project value:	<b>1.47660143</b>
Investment return period:	<b>6 years</b>
Number of employees (new employment)	<b>25</b>
Business results in the 7 <sup>th</sup> year of project economic period:	
- total revenue	<b>95,866,740</b>
- total costs	<b>84,269,644</b>
- net profit	<b>11,597,096</b>
- retained profit	<b>11,017,241</b>



### **3. ANALYSIS OF DEVELOPMENTAL POSSIBILITIES AND INVESTOR CAPABILITY**

#### **3.1. General Investor Data**

EcoCortec, limited liability company, dealing with production and trade, is the investor for the project of Constructing and Equipping the Production Plant in the business zone II in Beli Manastir.

The tax and registration number of the company is 1891782.

The basic activity of the investor is production and trade, while the company has been registered for performing the following activities:

- producing products of rubber and plastic
- road goods transport
- trade mediation, representing foreign companies

The basic activity of the company is the production of poly-ethylene film and bio-dissolvable film that has been performed for a number of years in the main company of one of the investor owners, the company of CORTEC Corporation, from St Paul, Minnesota, USA. The investor shall, along with the long-term contract on licensed production in Croatia, initiate the production and distribution of licensed and patented products of the company Cortec Co., with the goal of supplying the ever-growing European market.

Beside the stated above, the company Cortec Corporation from USA also represents a direct investor and warrant for obtaining part of funds needed for the execution of the investment.

The company Cortec is in direct ownership of Mr Boris Miksic, and currently employs 140 people in four production plants, and has continually been increasing year by year its market share, developing new products – which makes it a market leader in the supply of specialized products for corrosion protection.

In accordance with the above, the company Cortec Corporation witnessed a 27% increase in sales of its products in Europe in 2004, and currently has 18 distributors of its products in different European countries. Research and product development and the production of raw base is done in the central plant in St Paul, the state of Minnesota. Products and semi-finished products are distributed from the central warehouse in USA for the European market, distributors and customers.

The logical sequence of the corporation business strategy was opening own production in Europe, and given the amenities of the act on free zones and the act on areas of special state concern and investor origin, the decision was reached to initiate production in Croatia, more accurately in the economic zone of the Town of Beli Manastir.

The EcoCortec technology for biodegradable plastic materials will be, in phase one, organized in a production plant of 1,700 square meters, and designed in accordance with strict regulations on environment protection. These product lines offer a full biodegradable alternative to plastic bags and materials using the polyethylene base, offering at the same time product characteristics superior to standard poly-ethylene products. The plant will be one of most modern in this part of Europe, for it will completely and exclusively be equipped with new automated equipment, with a high degree of ecological protection and better energy utilization.

The yearly capacity of the production of polyethylene film with VpCI inhibitors against corrosion and biodegradable plastic film is approximately 3,000 tons of finished products. About 95% of products will be produced for foreign customers and distributors. The initial production phase is foreseen as employing 25 people, while employee training for the application, but also the development of new technologies and innovations, will be especially organized and encouraged. The business developmental plan foresees the extension of production and the construction of a new production plant, with additional 1,500 square meters of space, the land plot for which has already been secured.

#### 4. ANALYSIS OF MARKET POSSIBILITIES

##### 4.1. Analysis of Sales Market

The company Cortec Co. was founded on 1 October 1977 and has been ever since producing anti-corrosive products based on the VpCI technology, synthetic and chemical compounds. Cortec Co. is composed of four member of the Group, three producers of which were, due to vertical integration, acquired. The Group, apart from stated production, produces in three more plants plastic mass and products out of plastic, so-called non-aerosol sprays for use in chemical industry and reprocesses paper.

The products of Cortec Co. can be grouped as follows:

- Corrosion Inhibiting Additives for Coatings, Fluids, Adhesives and Plastic
- MCI® Concrete Protection Products
- VpCI® Eco & MRO Products - Repair and Maintenance
- VpCI® Products for Protection of Electronics and Electrics
- VpCI® Enhanced Lubricant Products
- VpCI® Generic Chemicals
- VpCI® High Performance Coatings
- VpCI® for Military Preservation Worldwide
- VpCI® for Flat-Rolled Steel Production
- VpCI® Packaging Products
- VpCI® Powder Products
- VpCI® Surface Preparation Products
- VpCI® Water Treatment Products
- VpCI® for Oil, Gas and Process Industries
- GalvaCorr™, a New Concept in Cathodic Protection
- VpCI® Metalworking Products

This analysis is attached a complete corporate brochure, but special emphasis should be given to the Cortec Advanced Film Division plant in Cambridge, MN, for the production plant of EcoCortec in Beli Manastir will have the same production program.

The sale and distribution of licensed products of Cortec Co., that the investor will produce, is currently – apart from the territory of North America – organized in 14 European countries and 7 countries in Asia. The highest sales growth is seen precisely in the European market; 2004 recorded the sales growth of excellent 27%, with a tendency of further development and market growth.

Based on business so far, and a detailed market analysis, the investor appraised the sales market has been secured, in addition – almost exclusively in foreign markets.

The values stated below relate to planned sales of the company of EcoCortec, limited liability company, based on values from 2004. The company will, during the first years, supply the part of the market it currently supplies from USA through a distributor network, given that producers making stated products (VpCI<sup>1</sup> 126, VpCI 125 and Ecofilms), also producing other products from the Cortec Co. assortment, on the basis of granted licenses for certain areas, cannot fully meet the demands of continuously growing European market.

As a consequence of the stated, the production of EcoCortec will, upon its commencement, fill in deliveries from USA, while producers that produce based on Cortec licenses will at the same time continue supplying the remaining part of European market (that their licenses allow for).

Table 1: an overview of distributors and territories covered, and the sales structure display for 2004

MARKET	SALES AMOUNT in US\$	SALES QUANTITY IN KG
<b>I) NORDIC (Denmark-Sweden, Norway, Finland, Iceland)</b>		
VpCI 126	640,000.00	129,293
VpCI 125	350,000.00	58,922
Eco films	312,000.00	40,521
<b>TOTAL</b>	<b>1,302,000.00</b>	<b>228,736</b>
<b>II) UK &amp; IRELAND</b>		
VpCI 126	745,000.00	150,505
VpCI 125	372,000.00	62,625
Eco films	274,000.00	35,586
<b>TOTAL</b>	<b>1,391,000.00</b>	<b>248,716</b>
<b>III) BENELUX</b>		
VpCI 126	821,000.00	165,858
VpCI 125	504,000.00	84,847
Eco films	163,000.00	21,170
<b>TOTAL</b>	<b>1,488,000.00</b>	<b>271,875</b>
<b>IV) EAST EUROPE (Czech Republic, Hungary, Poland, Romania, Greece)</b>		
VpCI 126	258,000.00	52,121
VpCI 125	195,000.00	32,828
Eco films	65,000.00	8,442
<b>TOTAL</b>	<b>518,000.00</b>	<b>93,391</b>
<b>V) FRANCE</b>		
VpCI 126	840,000.00	169,697
VpCI 125	395,000.00	66,497
Eco films	392,000.00	50,911
<b>TOTAL</b>	<b>1,627,000.00</b>	<b>287,105</b>

<sup>1</sup> Vapor Corrosion Inhibitor

**VI) SPAIN**

VpCI 126	425,000.00	85,858
VpCI 125	256,000.00	43,097
Eco films	234,000.00	30,391
<b>TOTAL</b>	<b>915,000.00</b>	<b>159,346</b>

Table 2: total sales structure for the market part taken over by EcoCortec

<b>PRODUCT</b>	<b>SALES AMOUNT IN US\$</b>	<b>SALES QUANTITY IN KG</b>
VpCI 126	3,729,000	753,333
VpCI 125	2,072,000	348,816
Eco films	1,440,000	187,021
<b><u>GRAND TOTAL</u></b>	<b>7,241,000</b>	<b>1,289,170</b>

Since 2005 witnessed the additional sales rise in the European market of 37%, the investor will have no problems selling planned quantities.

The existing distributor network, as one part of the market strategy, is organized as a centralized distributor network system. In other words, products are sent and sold to distributors from the main Cortec company warehouse, without direct sales to end consumers. With this business decision, Cortec effectively structured its sales market, limiting itself to selling to one company per sales area, most often a country. The company EcoCortec, limited liability company, will be able to utilize the distributor network of Cortec Co., and will produce and deliver based on orders of general distributors of the countries stated in Table 1.

The Cortec Co. distributor network in Europe covers the areas of the following countries:

1. Germany (licensed production and distribution)
2. France
3. Benelux (Belgium, Netherlands, Luxemburg)
4. Great Britain
5. Italy (licensed production and distribution)
6. Spain
7. Sweden
8. Greece, Turkey (licensed production and distribution)
9. Finland
10. Poland
11. Croatia
12. Rumania
13. Slovakia
14. Russia (licensed production and distribution)

The advantages of this system are better collection of receivables, less post-sales services, for customers/distributors are already experienced in sales, and avoiding unnecessary problems with direct consumers. Also, each of distributors annually renews its distribution and/or production contract as per Cortec product license, and along with the contract secures annually a bank guarantee as sales security.

However, at the same time, each customer has at its disposal a round-the-clock info phone line directly to the plant in USA and e-mail communication, which is a precondition for insight into customer requirements and problems, i.e. for the development of new and bettering existing products. This direct communication is of special importance because larger consumers, customers like Nokia Instruments, Siemens or General Motors, continuously research and develop new products, which changes the necessary features of Cortec company products, especially in terms of protective packaging used for corrosion protection.

The basic groups of future investor products are the following two: 1. biodegradable films, and 2. polyethylene films for protection against corrosive influences with VpCI inhibitors against corrosion. The estimated yearly production of polyethylene film with VpCI inhibitors against corrosion and biodegradable plastic film that would be exported (95%) to European and Asian countries is approximately 3,000 tons of finished products.

The EcoCortec technology for biodegradable plastic materials has been designed in accordance with strict regulations on environment protection. Cortec is the founder of producing two patented, new technology products: EcoWorks and EcoFilm. Both product lines offer a full biodegradable alternative to plastic bags and materials using the polyethylene base, offering at the same time product characteristics superior to standard polyethylene products. Currently these make 15% of products in production structure, but already in 2004 the market of bio-dissolvable films amounted to 40,000 tons, while in 2005 – 100,000 tons. Additionally, in European countries, the law that will define the use of bio-dissolvable films instead of poly-ethylene packaging is expected to be passed – France and Finland have already reached resolutions under which poly-ethylene packaging (based on oil) must be replaced with biodegradable packaging (based on starch), within 5 years. Also, by virtue of the rise of oil derivatives prices, a growth of the prices of polyethylene packaging can be expected, that will be replaced by biodegradable packaging. We point out that the production line and the equipment of the investor are adjusted to the production of conventional polyethylene film, but also of biodegradable films, which makes it rare in European terms.

These films and bags are produced using the patented combination of high-quality resins and products based on agricultural products (corn), and they ensure multi-metal protection and are not toxic. EcoWorks and EcoFilm films can be combined with the VpCI technology for corrosion protection (EcoCorr films), anti-electro-static protection – thereby making the current most diverse offering of biodegradable packaging. EcoFilm and EcoWorks biodegradable films are available in all shapes and quantities that the conventional polyethylene production is available in.

The current volume of Cortec company film sales in Europe is approaching the capacity of the future plant of the investor, so initially the investor – the company EcoCortec – will in the new plant produce films for a part of the European market. Through market and sales development, a growth in demand for produced products is expected, and therefore an extension in plant capacity, the land plot for which has already been secured.

Also, beside own production articles that will be sold directly to the European distributor network, by realizing this investment, the investor thus secures preconditions for new channels of cooperation with other plastic film producers that it would conduct service production for (the so-called Lohn and/or licensed business activities).

#### **4.2. Analysis of Procurement Market**

The products of the investor, company Cortec, will be adjusted to market i.e. customer and distributor requirements. The specialization of products and production program is achieved through changes in the mixture of polymers and additives during production.

The basic polymers used in production are biodegradable polyethylene resins, resins of linear polyethylene of low density (LLDPE), polyethylene resin of low density (LDPE) and polyethylene resin of high density (HDPE). Additives that are used number, among others, the blue VpCI Masterbatch and the ESD, an additive against electro-static.

Polyethylene resin will be procured from large European producers (INA (DIKI), Huntsman or Dow Chemicals), while additives will be imported directly from USA.

In future, the investor intends to continue the current cooperation with vendors and to find new vendors with more favourable delivery terms, primarily having in mind the price of materials, but also the use value in terms of the characteristics for biodegradation.

Based on the market analysis for materials for conducting this business activity, it can be said the investor can easily substitute polyethylene resin vendors with other vendors, while for procuring production additives, it will base the operation on the cooperation contract with the main company of Cortec Co. From what was stated above, it can be appraised the procurement market will not represent a limiting factor for the growth of investor's business.

#### **5. TECHNOLOGICAL-TECHNICAL ANALYSIS OF THE INVESTMENT**

For the technical-technological analysis, inter-disciplinary approach is of special importance, for it provides all necessary information on technical and technological business activities of the investment project, giving a description of the technological process, legal and organizational solutions, a list of necessary basic funds, qualification

structure and the number of employees, an analysis of the location, and environment protection.

Soon after the registration of the company, the contract was signed with the Town of Beli Manastir on the handover of the land plot of 9,885 square meters in the zone area, land registry file 2073, land plot number 3050/1, and the process of obtaining all permits and assents was initiated, that resulted in getting the location permit in May 2005, and construction permit in October 2005. In November 2005, construction work on the object started, while the production line assembly and test production are expected in mid-2007.



### 5.1. Technological Aspects of the Investment

Planned object was designed to be constructed with traditional materials and construction methods, but despite this, the tendering documentation was created, based on which the construction work will be allotted to a qualified legal entity/entities, with a supervisory engineer engaged.

Upon the request from the investor, the company SIRRAH, limited liability company, Osijek, designed the object of the production plant in Beli Manastir in the land plot number 3050/1, land registry municipality of BELI MANASTIR. The space of the construction plot is 9,885 square meters, and it is located within the economic-business zone of the Town of Beli Manastir.

The purpose of the object is of business nature – a production plant for the production of polyethylene and biodegradable films, EcoCortec.

The object itself was designed as a one-storey building, where production and warehousing spaces are located, except for a small object part that is composed of three floors which serve as areas for technical personnel.

The production plant of EcoCortec consists of the main building with the necessary parking lot, the drive and the manipulative area.

The intended spatial work will be executed in accordance with the documents of spatial planning, special laws and regulations, and the location, i.e. the construction permit. The location permit for the investment was issued on 21 June 2005; class: UP/I 350-05/05-01/76; receipt number: 2158-11-03/02-05-19 KS, and it was issued by the State Administration Office in the County of OSJECKO-BARANJSKA, by the Department of Spatial Planning, Environment Protection, Construction and Ownership-Legal Affairs, Office of BELI MANASTIR; the construction permit was issued on 13 September 2005, class: UP/I-361-03/05-01/52, receipt number: 2158-11-03/01-05-09 KS, and it was issued by the State Administration Office in the County of OSJECKO-BARANJSKA, by the Department of Spatial Planning, Environment Protection, Construction and Ownership-Legal Affairs, Office of BELI MANASTIR.

The production hall, with the ground plan layout dimensions of 51.16 x 30.76, is in the central, while the parking lot area is in the northern part of the plot.

The production hall is located, by its length axis, approximately in the direction of NORTH-SOUTH.

The height of the object is 11.55 meters, as measured from the terrain, except for the middle higher object part, the height of which is 17.00 meters.

In the north-western plot part, in relation to the object, a parking lot with the total of 37 lots with the dimensions of 2.5 m x 5.0 m is located, and in the northern part, in relation to the object – 3 lots for disabled persons with the dimensions of 3.5 m x 5.0 m, that are located immediately next to the production plant entry. In the space area south to the

object, a loading ramp is foreseen for transport vehicles, while around the whole object a fire lane is foreseen.

In the area immediately next to the hall, manipulative areas for foot traffic etc. were designed, that are paved with concrete slabs. On the south side, the unloading ramp is located.

The manipulative area has been designed by simulating possible trajectories of hauling vehicles with the maximum length of 16.8 meters, with the addition of approximately 20% of free space. Parking will be done vertically.

#### **□ Construction and Materials Used**

For the construction of the hall, prefabricated AB stretched main beams with parallel belts were selected, according to graphic attachments and the static calculations.

The stretched beams will be executed with one-eave drop which already caters for the possibility of subsequent construction of a hall of the same size in the other, east side of the object.

The vertical construction consists of reinforced concrete façade columns, with the dimensions of 60/60 cm, and the interval of 720 cm (horizontal side), i.e. 750 cm (gable side). The columns are stretched from the base insert that is solidly connected to the base element with the dimensions of 2.00 x 3.00 m (TS-1) and 2.50 x 4.20 m (TS-2). The base elements are connected in the vertical direction to the base beams that thermo-insulation panels lean to, thus enclosing the object vertically. Diagonally, in the axes of 1, 3, 6 and 8, the base elements are to be linked to base beams that stretch below the floor AB slab.

Over a part of the object, on account of exceptional machinery height, above the AB beams – there is a steel construction with the ground plan dimensions of approximately 10,00 x 15,00 m, with the height of approximately 6.50 m. The steel construction is made of HEA profiles.

The object, in its final function, continuously employs approximately 45 employees of different training. Given the nature of business, the ground floor shall provide for men's cloak rooms and toilets, while the floors provide for toilets for men and women.

#### **□ Heating**

The hall area is foreseen to be heated by hot air from infra gas heaters. The social part is to be heated and cooled by valve-convectors, radiators, and in the entry hall – by floor heating. For the heating of the social part of the building, hot water is foreseen 80/60 (°C), that will be prepared in the facade gas condensation boiler, and distributed, with the aid of circulation pumps, to air-conditioning chambers, ceiling valve-convectors, radiators, floor heating and hanging air heaters.

#### **□ Ventilation**

In all toilets, by group, central pumping-out ventilation will be executed, via joint roof pumping-out ventilators.

All ventilators placed on the roof will be jointly equipped by a noise muffler.

#### □ **Electrical Installations**

When executing the overall electrical installations, it is necessary to adhere to valid regulations and technical conditions for the connection of an individual energy supply distributor, as well as to the additional instructions from institutions issuing individual permits and assents. It is necessary to adjust these instructions to national regulations. Dimensioning the main inlet is determined in accordance with technical requirements. For measuring power consumption, it is necessary to request a meter 1/4h to be installed and to determine the most favourable energy consumption.

In the south plot part, there will be a power unit, that is the location of electrical energy takeover.

The connections and meters are set up in the low voltage room.

#### □ **Technical Description for Environment Scaping**

Proscribed green areas, unless officially proscribed and mandatory otherwise, are planted with greenery that is easy to maintain (e.g. Efeu, Cotoneaster); the height of plants approximately 30 cm; planting density 4 - 5 pieces/m<sup>2</sup>.

The shrubbery has the minimum planting height of 60 – 80 cm.

Trees, at the moment of planting, has the trunk girth of 16 – 18 cm. Species easily maintained are planted, like maple, elm etc. (Lime, birch, poplar and evergreen trees are not planted.)

An estimate of the value of individual construction work phases:

<b>Construction work</b>	<b>Amount in HRK</b>
1.Ground work (site construction, digging, ground works)	306,270.00
2.construction phase I (scaffolding, masonry, concrete and reinforced concrete works)	3,255,960.00
3.construction phase II (roof tiling, window, façade works, environment scaping)	2,757,745.00
4.Finishing works (ceramics, etc.)	612,300.00
5.Water and sewage connections	535,760.00
6.Other works	100,365.00

TOTAL: HRK 7,568,400.00

For each individual phase of works execution, the investor shall obtain three quotations, and for the unit of the highest value (concrete and reinforced concrete works) it will obtain 5 quotations, for the executor of this unit will also be selected as the official investment constructor.

## 5.2. Technological Aspects of the Investment

The object will be used as a production plant, and will be accompanied by facilities for uninterrupted plant functioning, like offices, toilets and other premises for employees, laboratory, warehouses for different goods, technical areas (rooms for low voltage and the compressor).

Within the production plant, a production line for blowing out (extruding) plastic granulates and the production of films is foreseen. The production line consists of:

1. machines for taking in raw material, equipped with bolts for pushing granulate and a command board The line 3 is equipped with three such machines which enables the production of specific films in several layers of different characteristics
2. towers for blowing out granulates. These towers are of different heights and demand the hall to be elevated to required height.
3. rollers for pressing and stretching that is followed by the machine for spooling finished films onto cardboard reels

THE SUPPLY – FILLING machines with raw material resin from the silo has been ensured thanks to aluminium pipes with the diameter of 5 cm that connect the silo with mixers, and vacuum pumps that push resin through pipes. Mixers are located on the scales, and the necessary raw material mix is dosed in this way; the mixers can also move, which enables the supply of raw until production lines.

Product line DIMENSIONS:

- Line 2: 3-LAYER BIGGER (8/10m open)..... Height 15.5 m x width 7.7 m x length 20 m

YEARLY PRODUCTION, MACHINERY CAPACITY - there is the overheating factor involved, which has been taken into account, and the factor of periodic machinery overhaul:

- Line 2: MONO LAYER BIGGER (8/10 m open)..... 500/600 kg/h = approximately 3,000 t annually

- The calculations were done using the two-shift operation basis x 300 working days annually, and display the maximum production capacity.

### MACHINE NOISE

Production lines create minimum noise during operation – lesser noise is created by water cooling machinery that cools blowers that are within production lines.

**MACHINES OUTSIDE PRODUCTION LINES:**

1. Machines for shaping films into finished products – converting lines (bag on a roll machine (in line) + side well bag machine and the bottom sealed machine (of line))  
- these machines are necessary for forming finished products out of the film, that as a semi-finished product comes out of production lines – the machines are adaptable for producing different product constructions and applications (from consumer bags to zip bags)
2. packing machine, wrapping the pallet up with stretch film – packing stretcher (stretch rapper)
3. machinery cooling system – consists of the cooler, pipes, pumps and water tank
4. raw mixers (hurricane mixture machine or a central mixing unit)
5. vacuum pumps for raw (for poly-ethylene pearls) – internal (next to each production line and next to raw mixers) – external (next to the silo)
6. reprocessing machine, machine for waste reuse, reuse of production film remnants  
- (reprocessing line) - ensures film waste-free production, for film waste is repalletized directly in the plant, and reused as raw

**MACHINERY COOLING METHOD**

The machinery cooling system consists of: cooler, equipped with a compressor, that is outside the object, pipes connecting the cooler and the device for air water cooling, the device for water air cooling that is next to production lines, water pumps and the water tank. This water tank has the capacity of about 1,000 liters.

The water used in the system has been distilled, and is combined with a liquid protecting and greasing the system, which at the same time prevents system water to freeze.

The cooling system water has minimum losses and the tank is refilled when necessary. The machinery cooling system produces no waste water.

**LABORATORY:**

- every 2-3 hours quality controls are performed according to random samples – communication and work at production lines is direct – the samples are taken from the first produced reel, production middle phase, and the last produced reel
- the truck with incoming raw materials waits to be unloaded until the raw quality has been lab verified

**LABORATORY EQUIPMENT:**

Devices, machines and aids in the laboratory:

- DIGESTOR – space for working with chemicals in a safe environment (can be closed and has a direct outlet to ventilation) for VIA tests (testing the efficiency of anti-corrosive films), and for SO2 tests
- AVATAR DEVICE – for FTIR tests that show the degree of VpCl inhibitor in the film + it is connected to a computer that has the software that shows the share of VpCl in the film (that must be within given parameters)

- TESTER FOR FILM ENDURANCE – a tensile test that measures the endurance of produced films and their degree of stretching ability (powered by compressed air)
- TEARING TESTER – test for the endurance of films to tearing and rupture (powered by compressed air)
- MACHINE FOR THE PREPARATION OF SAMPLES – for the preparation of standardized film samples (of size 1 inch x 4 inches) – completely manual, not operated by power etc.
- SMALL MICRO SCALES
- DEVICE FOR TESTING FILM THICKNESS – quality control
- OVEN – can reach very high temperatures (400 Celsius)
- ROTATIONAL ABRADOR – desk abrador for the preparation of metal samples
  
- AREA FOR STORING CHEMICALS – smaller quantities (methanol, glycerin)

The investor therefore plans to finance through this investment the purchase of new production lines and necessary equipment from Italian manufacturers, that would secure material preconditions for the execution of planned production quantities, and other preconditions for future increase in production capacities.

By procuring vehicles for the transport of goods and raw, the continuity of production with minimum costs would be ensured; it is also necessary to lease a vehicle, a fork-lifter for the purposes of warehousing activities.

The investor plans to purchase the production lines and all equipment necessary for initiating production and lab equipment abroad; according to vendor quotation, the total investment in equipment and machinery is EUR 1,830,000.00.

For the equipment, a three-year unlimited warranty has been arranged, as well as one-month training for employees for the utilization of the same, which in long term ensures uninterrupted business activities of the investor.

Equipment Description	Number of units	Unit price in EUR	Total price in EUR
Production 3-layer line ZOCCHI, of production width 3500mm – extruder OF93	1	1,200,000	1,200,000.00
Machinery outside production lines – engineering and electro project	X	570,000	570,000.00
TOTAL			1,770,000.00

The investor also intends to purchase the vehicle FURGON MERCEDES-BENZ SPRINTER 3550 216 CDI, of total purchase value, according to vendor quotation, and a fork-lifter powered by gas, for warehousing operations.

The value of stated work machinery is, according to quotations, EUR 60,000.

The technological production process for polyethylene and biodegradable films has several phases:

a) EXTRUSION

The first step in production is the extrusion process, where raw resin is turned into film. Production lines with extruders are capable of producing different specific configurations, like: bags sealed on one side, bags sealed on several sides, roll bags, zip bags, wave plastic bags and sheeting.

Also, films with different concentrations and color nuances are available, with different VpCl corrosion inhibitors and other specialized additives against, for example, static electricity, or for higher heat resistance, fire resistance, and with additives of ultra-violet inhibitors, which allows for the finished product to be adjusted to individual needs of end consumers. The sizes of films are from 5 cm minimum width to 12 meters of maximum width, depending on the necessary film configuration.

b) SHAPING

During this production process, the film is shaped into bags of a wide array of sizes, shapes and styles, for the purposes of packing food products, equipment, electronic assemblies, spare parts or simply – anything the consumer expects, i.e. requires. Specialized tools and aids enable the production of special v-shaped closure bags, or with some other shape. Different shapes, dimensions and the arrangement of slits and holes can be executed for the purposes of ventilation, or for the purposes of manipulating products (hanging, carrying). This production part fulfills all special needs for packing in an innovative, creative and experienced way.

c) PRINTING

The printing plant can deliver currently most attractive printing available in the market. We can print materials from 10 cm to 112 cm in width, using one to three different colors. Using different half-tones, shading effects are possible.

In the new production plant, uninterrupted production continuity would be ensured, together with having production phases linked in an optimum manner, and maximum space utilization and production rationalization.



### **5.3. Environment Protection and Work Safety**

The business activity of the investor does not belong into the category of high risk degree, and possible impacts on environment can easily be assessed, and in accordance with this, standard measures for preventing and/or averting unfavourable influences applied, without the need for the execution of full analysis of impacts on environment, or an ecological revision.

Work safety is foreseen by customary measures and standard safety means, and by applying all regulations and rules on work safety.

Fire hazard protection will be executed in cooperation with an authorized company that has fire protection as its basic activity.

## **6. LOCATION**

### **1. Macro-Location Analysis**

The county of Osjecko-baranjska is located in the north-east part of the Republic of Croatia, in the Pannonian area, and stretches in the area of 4,152 km<sup>2</sup>. In the northern part of the county, in the immediate vicinity with Hungary (EU) – 8 km, Serbia – 12 km and Bosnia and Herzegovina – 120 km, the town of Beli Manastir is located, i.e. the business zone II of Petlovac.

The county area is criss-crossed with over 1,700 km of roads and 180 km of railways. The rivers of Danube and Drava (that is navigable down to Donji Miholjac, and has the status of an international waterway until Osijek) connect this area with the European river network also. The connection to the rail system is ensured within the zone. With two airports near Osijek (Osijek and Klis), the county is connected to the Croatian airport network; from the stated airports, the zone is only 35 km away.

Through Beli Manastir, the European traffic corridor V7C passes, connecting the north of Europe (the Baltic) with its south (the Adriatic). The corridor is in the immediate vicinity of the zone (500 meters). The construction of a trans-European motorway of Budapest-Beli Manastir-Osijek-Sarajevo-Ploce is being prepared (in the scope of the TEM project).

The land plot characteristics, i.e. of the zone macro location are displayed with clarity in the following table.



Town/Municipality	Zone name
GRAD BELI MANASTIR	BUSINESS ZONE BELI MANASTIR

Traffic connections – distance in km from:

Roads	Motorways	Railways	Airports	Sea ports	River ports
0	1	0	25	—	20

Communal infrastructure:

Gas	Electricity		Water	Sewage	Phone
NO (2008)	YES (MARCH 2006)		YES (NOVEMBER 2005)	YES (NOVEMBER 2005)	YES (MARCH 2006)
Land area (ha)	Number of plots	Price (kn/m2)	Free plots	Number of entrepreneurs in the zone	Number of employees
18,2	46	0	27	16	174

It can be seen from the table that connecting the land plot to the communal infrastructure is currently underway, and that the end of works is expected in March 2006, which will not interrupt the development of the EcoCortec investment.

## 6.2. Micro-Location Analysis

The project micro location is the economic zone in Beli Manastir, that is in the western part of the town, by the main road to Belisce, and in the immediate vicinity to the international road corridor Vc and the town bypass. The area works are performed in the land plot number 3050/1, land registry file 2073, the area of 9,841 m<sup>2</sup>.

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## 10. COLLECTIVE APPRAISAL AND CONCLUSIONS

Based on descriptive, quantity and quality indicators stated in the program, the collective appraisal and conclusion can be reached that investing in the program of the Construction and Equipping of the Production Plant by the investor company ECOCORTEC, limited liability company, Beli Manastir, is financially and economically justified, and that the project is in its entirety acceptable for execution.

Such a collective appraisal and conclusion were derived based on the following elements:

### **1. Value of indicators for the financial and market investment profitability appraisal:**

- 1.1. The return of the investment would be finished in the 6<sup>th</sup> year of the economic period (in 2011)
- 1.2. The current value of net receipts of the Project Economic Flow, with the discount rate of 4%, is positive and amounts to HRK 53,838,419
- 1.3. The internal profitability rate is higher than the average financing rate and is 22.77%
- 1.4. The current relative net investment value is 1.47660143

### **2. Functional Criteria**

- 2.1. The project business is successful in all years of project period
- 2.2. The success and profitability indicators for the investment and business activity are acceptable
- 2.3. The project is liquid in all execution phases, and in all years of business activity
- 2.4. The project sensitivity analysis displays that the project can be successful even in cases of negative changes in some key business parameters

### **3. Descriptive and Additional Indicators**

- 3.1. The investment secures business continuity and employs 25 new people
- 3.2. Conditions and material base are secured for the development of the investor and the community

Finally, as a synthetic appraisal of the project, it can be said the project of the Construction and Equipping the Production Plant is, in its whole, acceptable for realization.